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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

SELLMAN, CACHET I

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1762

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/751,102 | FERBER ET AL. | |
| | Examiner | Art Unit | |
| | Cachet I. Sellman | 1762 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/5/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/28/2004, 2/14/2003, 1/4/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to a process for applying glue, classified in class 427, subclass 207.1.
 - II. Claims 8-14, drawn to an apparatus for applying glue, classified in class 118, subclass 1+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be performed using a materially different apparatus such as one that does not require that the nozzles come in contact with the material web or blanks for packs.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with John Mion on 4/12/2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-7.

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Affirmation of this election must be made by applicant in replying to this Office action.

Claims 8-14 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

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- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

In the specification the claims and abstract are not a separate sheet of paper, it contains info such as the applicant, the applicants address, and title of the invention. It is suggested that the applicant removes the information from the claims section and abstract.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the applicant claims a process for the application of glue "in particular glue of the hot melt type" is applied to "preferably to a continuous material web" that can be controlled by a desired thickness of the glue regions—"glue areas and glue strips (20)"- on the packaging material. It is unclear to the examiner as to what is meant by "in particular glue of the hot melt type" and preferably to a continuous web" does this mean the applicant is only claiming hot melt type of glue or any type of glue and that it is applied to only a continuous web or that it can be applied to any type of packaging material. The statement glue regions-glue areas (16) and glue strips (20)- it is unclear if the applicant is further defining glue regions therefore it is unclear as to what the applicant is claiming. In claim 2, the applicant states that the process of claim 1 is used for the purpose of producing blanks with a plurality of glue region for different tasks, "in particular with glue areas (16) for the purpose of connecting edge strips (14,15) of the blank and glue strips (20) for the purpose of fixing folding tabs of an end wall". It is unclear if the applicant is claiming that the glue is applied for the purpose of connecting edge strips (14,15) of the blank and glue strips (20) for the purpose of fixing folding tabs of an end wall or if the applicant is claiming that the glue is applied to the blanks for any task. In claim 3, the applicant claims that the nozzles are regulated by a common control unit, "in particular by a (central) machine control unit (31), It is unclear if the applicant is only claiming the central machine control unit or any common control unit. In claim 4, the applicant claims that the glue pressure

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is altered during a phase of glue application or during a work cycle, "in particular for the purpose of generating glue regions with different glue layer thickness" it is unclear if the applicant is only claiming that the glue pressure is during a phase of glue application or if the pressure is altered to generate glue regions with a different glue layer thickness. In claim 5, the applicant claims that the movement of the material web is determined by a deflection or draw roller of the material web "preferably by a resolver" it is unclear if the applicant is claiming that the movement is determined by a resolver or any type of deflection or draw roller. In claim 6, the applicant requires that the material is conveyed in a non-uniform manner, "in particular in a fixed cycle operation where it is accelerated from a standstill state to a maximum velocity, then at a constant speed and subsequently decelerated back to standstill state" it is unclear if the applicant is claiming that the material is conveyed in the fixed cycle above or in any non-uniform manner therefore it is unclear as to what the applicant is claiming.

It should be noted that the examiner will use the broadest interpretation of claims 1 -6. In claim 1 the examiner will assume that the applicant is claiming that any type of glue can be used for the process and can be applied to any type of packaging material. In regards to claim 2, the examiner will assume that the applicant is claiming that the glue is applied in glue areas for different tasks. In regards to claim 3, the examiner will assume that the nozzles are controlled by a common control unit . In regards to claim 4, the examiner will assume that the glue pressure is altered during a phase of glue application or during a work cycle. In regards to claim 5, the examiner will assume that

the movement is determined by a deflection or draw roller. In regards to claim 6, the examiner will assume that the material is conveyed in a non uniform manner.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Collin et al. (US 2002/0022080 A1).

Collin et al. discloses a process for applying spots of adhesive paste (hotmelt [0031]) to successive objects such as paper or cardboard blanks which are converted into soft or hinged lid packs (abstract) using nozzles with closeable nozzle openings [0014] where the glue is supplied under pressure that can be adjusted on an individual basis as determined by the conveying speed of the packaging material [0014-0016] as required by **claim 1**. Collin et al. further discloses that the opening phases of the glue nozzles (24) are regulated by a common control unit (Figure 1, [0035]) as required by **claim 3**. The line of movement of the material to be glued is determined in the region of a deflection or draw roller of the material web which is connected to the common control unit (Figure 1, [0037]) as required by **claim 5**. The conveyor material web is conveyed in the region of glue assembly in a non-uniform manner [0014] as required by **claim 6**.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collin et al.

The teachings of Collin et al. as applied to claim 1 are as stated above.

Collin et al. does not teach that the conveying speed of the packaging material is determined cyclically on the basis of a change in rotation angle of the resolver and converted to a velocity value and the velocity value is calculated with an algorithm stored in the control unit to arrive at an appropriate pressure value as required by **claim 7**. However, Collin et al. does teach that the control unit receives signals denoting the speed of the conveyor of the objects (abstract) and that from the signal the control unit sends out a signal to the pressure regulator therefore it would be obvious to one having ordinary skill in the art that in order for the control unit to control the pressure using the speed of the conveyor it must use the velocity to determine the pressure and send out a signal to the pressure regulator.

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12. Claims 2 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Collin et al. as applied to claim 1 above, and in further view of Heide (US 2001/0018818 A1).

The teachings of Collin et al. as applied to claim 1 are as stated above. Collin et al. further discloses that varying amounts of adhesives are dispensed onto certain areas of the blanks [0031-0033] and that the amount of adhesive is determined by the pressure regulator and the control unit receives the information and controls the valve [0033].

Collin et al. does not disclose regulating the glue layer thickness of the glue regions having different functions on the blanks through pressure or by conveyor movement as required by **claims 2 and 4**.

Heide discloses a process for applying adhesive to selected portions of successive blanks of a series of moving blanks that can be used for packets of cigarettes (abstract). Each blank receives three patches or strips of films of adhesive. One of these strips can serve to bond a flap at one end of a carton, the other strip bonds a flap at the other end of a carton, and the third strip contains adhesive for the longitudinally extending flap which separably bonds the cover of the carton to a front wall of the latter [0038]. The flow of adhesive to the specific part of the blank is controlled by a valve, which regulates the flow of adhesive from the nozzle. Heide also

discloses the importance of correctly placing the adhesive to the blanks in order to avoid applying adhesive film to parts of the blank that should not receive adhesive which results in bonding parts of the blank that are not to be bonded together and failure to bond parts that are to be bonded together.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Collin et al. to include applying adhesive to specific areas of the blanks as taught by Heide . One would have been motivated to do so because both discloses processes for applying adhesive for the use of packaging and Heide discloses the importance of applying adhesive to certain parts of a blank in order to ensure proper bonding to form a carton therefore one would have a reasonable expectation of success in forming controlling the application of adhesive to certain areas of the blank therefore one would have a reasonable expectation of success in controlling the amount of glue in the different regions by controlling the pressure or the conveyor speed when applying adhesive to the blanks.

13. Claims 1,2, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estelle et al. (US 6517891 B1) in view of Heide (US 2001/0018818 A1).

Estelle et al. discloses a process for controlling the speed of a motor on a metering pump that provides pressurized fluid at a dispensing gun where the dispensing gun is opened or closed to dispense fluid onto a substrate being carried by a conveyor

past the dispensing gun. The pressure is controlled by the conveying speed (abstract) and flow is also controlled by the conveyor speed (abstract). Estelle et al. discloses that the process can be used to dispense viscous materials such as hot melt adhesives (column 1, lines 6-9). Estelle et al. further discloses the importance of consistent application of adhesive in packaging and plastics industries (column 1, lines 13-17) because inconsistency can result in unusable and scrap product and increases costs (column 1, lines 17-20).

Estelle et al. does not disclose that the process is used to dispense glue onto packaging material as required by **claim 1**.

Heide discloses a process for applying adhesive to selected portions of successive blanks of a series of moving blanks that can be used for packets of cigarettes (abstract). Each blank receives three patches or strips of films of adhesive. One of these strips can serve to bond a flap at one end of a carton, the other strip bonds a flap at the other end of a carton, and the third strip contains adhesive for the longitudinally extending flap which separably bonds the cover of the carton to a front wall of the latter [0038]. The flow of adhesive to the specific part of the blank is controlled by a valve, which regulates the flow of adhesive from the nozzle. Heide also discloses the importance of correctly placing the adhesive to the blanks in order to avoid applying adhesive film to parts of the blank that should not receive adhesive which

results in bonding parts of the blank that are not to be bonded together and failure to bond parts that are to be bonded together.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Estelle et al. to be used to dispense adhesive to blanks used in packaging as taught by Heide. One would have been motivated to do so because both disclose processes for dispensing adhesive to a substrate and Estelle et al. further discloses the importance of dispensing adhesive to a substrate used for packaging consistently in order to avoid scraps and increase in costs and Estelle et al. discloses the importance of applying the adhesive to the correct areas of the blank in order to ensure bonding of the correct parts therefore one would have a reasonable expectation of success in applying adhesive to certain areas of blanks consistently.

During changes in conveyor velocity the motor speed control provides. the first signal to the pump motor to provide fluid to the dispensing gun at pressures changing at a rate tracking a rate of change of the speed of the conveyor. Estelle et al. also provides a method for generating pressure related and conveyor speed related signals and automatically switching between those signals as a function of conveyor speed (abstract) as required by **claim 7**. The flow of the fluid is automatically controlled as a function of conveyor speed (column 4, lines 4-11) as required by **claim 2**.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cachet Sellman
Patent Examiner
Art Unit 1762



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER